(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 8 January 2004 (08.01.2004)

PCT

(10) International Publication Number WO 2004/003289 A1

(51) International Patent Classification7:

D21C 5/00

(21) International Application Number:

PCT/IL2003/000537

(22) International Filing Date: 26 June 2003 (26.06.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 150478

27 June 2002 (27.06.2002)

- (71) Applicant (for all designated States except US): O.P.T. INTERNATIONAL LTD. [IL/IL]; 4 Eshel Street, 98531 Maale Adumim (IL).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): AHARON, Refael [IL/IL]; 4 Eshel Street, 98531 Maale Adumim (IL).
- (74) Agents: LUZZATTO, Kfir et al.; Luzzatto & Luzzatto, P.O. Box 5352, 84152 Beersheva (IL).

- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: A PROCESS FOR THE PRODUCTION OF CELLULOSE FIBER PULP

.(57) Abstract: The invention provides a process for producing mechanical pulp from vegetative matter. The process comprises using high pressure fluid jets to break apart the vegetative matter into small particles and to further reduce the size of the particles by causing them to pass through one or a series of screens or gratings. Each screen or grating in the series comprising successively smaller openings than those of the previous one. The process produces pulp that is suitable for many applications. The pulp attained may be delignified by the addition of further mechanical and/or biological steps.